22. (AMENDED) The process as claimed in claim 45, wherein the efficiency of insertion of the nucleic acid of interest into the target cell nucleus is 30% or greater.

23. (AMENDED) The process as claimed in claim 45, wherein the nucleic acid of interest is in a vector.

27. (AMENDED) The process as claimed in claim 45, wherein the target cell is a non-dividing cell.

28. (AMENDED) The process as claimed in claim 45, wherein the target cell is a HeLa cell or a hematopoietic cell.

30. (AMENDED) The process as claimed in claim 46, wherein the nucleic acid is in a vector.

31. (AMENDED) The process as claimed in claim 46, wherein the gene of interest is expressed in tissue culture.

32. (AMENDED) The process as claimed in claim 46, which further comprises purifying or isolating the product of expression of the gene of interest.

Please add the following new claims:

-44. (NEW) A nucleic acid, wherein the nucleic acid comprises:

(A) retroviral nucleic sequences consisting of:

(1) ψ packaging sequences;

(2) cis-acting nucleic acid sequences for reverse transcription;

(3) cis-acting nucleic acid sequences for virus integration;

(4) at least one cPPT sequence and at least one CTS sequence; and

(5) optionally a cis-acting sequence RRE;

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and

(B) at least one heterologous nucleic acid sequence of interest,

wherein the nucleic acid induces import of the heterologous nucleic acid sequence of interest into a cell nucleus.

45. (NEW) A process for inserting a heterologous nucleic acid sequence of interest into a nucleus of a target cell, *in vitro*, wherein the process comprises exposing an isolated or purified nucleic acid to a target cell under conditions that permit uptake of the isolated or purified nucleic acid into the target cell, wherein the isolated or purified nucleic acid comprises:

(A) retroviral nucleic sequences consisting of:

(1) ψ packaging sequences;

(2) cis-acting nucleic acid sequences for reverse transcription;

(3) cis-acting nucleic sequences for virus integration;

(4) optionally a cis-acting sequence RRE; and

(5) at least one cPPT sequence and at least one CTS sequence;

and,

(B) at least one heterologous nucleic acid sequence of interest,

wherein the isolated or purified nucleic acid induces import of the heterologous nucleic acid sequence of interest into the cell nucleus.

46. (NEW) A process for expressing a heterologous nucleic acid sequence of interest, *in vitro*, wherein the process comprises:

(A) exposing a target cell to an isolated or purified nucleic acid under conditions that permit uptake of the isolated or purified nucleic acid into the target

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cell to create a recombinant cell, wherein the isolated or purified nucleic acid comprises:

(1) retroviral nucleic sequences consisting of:

(a) ψ packaging sequences;

(b) cis-acting nucleic acid sequences for reverse transcription;

(c) cis-acting nucleic sequences for virus integration;

(d) optionally a cis-acting sequence RRE; and

(e) at least one cPPT sequence and at least one CTS sequence;

and

(2) at least one heterologous nucleic acid sequence of interest, wherein the isolated or purified nucleic acid induces import of the heterologous nucleic sequence of interest into a cell nucleus,

and

(B) culturing the recombinant cell under conditions that permit at least part of the isolated or purified nucleic acid to be transferred to the nucleus of the recombinant cell and the heterologous nucleic acid of interest to be expressed.

47. (NEW) A nucleic acid comprising the *Cla*I insert and *Eco*RI/*Bam*HI insert of the vector pTRIPΔU3EF1αGFP deposited at National Collection of Cultures of Microorganismes, Accession Number I-2328.

48. (NEW) A vector comprising the nucleic acid as claimed in claim 50.

49. (NEW) A recombinant cell comprising the vector of claim 13.--

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